

STUDIES IN THE HELIANTHEAE (ASTERACEAE). III.

A NEW SPECIES OF SCHISTOCARPHA.

Harold Robinson
Smithsonian Institution, Washington, D.C. 20560.

Material of the genus Schistocarpha is frequently encountered among specimens casually determined as Eupatorium. This is particularly true of S. oppositifolia (Kuntze) Rydb. with its reduced female flowers in many series. Unfortunately, the uncritical use of broad genus concepts such as Eupatorium and Senecio has encouraged such misidentifications. The species of Schistocarpha described here had been annotated as Eupatorium in spite of rather distinct rays.

Members of the genus Schistocarpha are notable for the capillary pappus and multiseriate unequal involucre bracts, both of which provide a resemblance to members of the Eupatorieae. The genus has been placed until recently in the Sencioneae mostly because of the combination of capillary pappus and ray flowers. The structure of the anthers with their keeled appendages, the form of the hairs on the corolla and the form of the paleae on the receptacle has more recently shown the genus to be clearly a member of the Heliantheae (Robinson & Brettell, 1973).

The new species of Schistocarpha is distinguished partly by the prominent rays, the unwinged petioles and the sparsely pilose stems. The involucre bracts are glabrous on the outer surface and have mostly short-pointed tips. Closest relationship seems to be with S. seleri Rydb. and S. longiligula Rydb. and the involucre bracts of the latter have rather densely fringed tips similar to those of the new species. Both S. longiligula and S. seleri have pedicels and branches of the inflorescence densely hirtellous while the new species has only very sparse long-stipitate gland-tipped hairs. The new species also has the most easily deciduous pappus seen in the genus, and the achenes are often completely epappose after extraction from the head.

The rather recently described Schistocarpha hondurensis Standley & L.O. Williams is close to S. seleri as indicated in the original description. The rays of S. hondurensis seem slightly shorter and broader than typical S. seleri, but the differences originally cited for the petioles have no value, and the rays alone do not seem to warrant species distinction. The species is represented by many collections from southern Mexico,

Guatemala, El Salvador, Honduras and Nicaragua.

The new species is named after Dr. Julian Steyermark now at the Instituto Botánico in Caracas, Venezuela. Dr. Steyermark's work in association with Dr. Paul Standley is the basis for the Flora of Guatemala series.

Schistocarpha steyermarkiana H. Robinson, sp. nov.

Plantae suffrutescentes erectae 1-2 m altae ? pauce ramosae. Caulis subrubrescentes teretes vel substriati parce pilosi vel subglabri. Folia opposita, petiolis 1.5-4.0 cm longis non alatis; laminae late ovatae 5-12 cm longae 2-9 cm latae base abrupte breviter acuminatae ascendenter trinervatae margine multo argute serratae apice distincte anguste acuminatae supra parce pilosae subtus subpallentes in nervis sparse pilosae. Inflorescentiae laxae paniculatae, pedicellis 4-13 mm longis glandulis minutis longiuscule stipitatis sparse obsitis. Capitula ca. 1 cm alta ca. 7-8 mm lata. Squamae involucri ca. 25 valde inaequilongae ca. 4-seriatae 3-7 mm longae plerumque 1.5 mm latae oblongo-lanceolatae apice obtusae vel subacutae extus glabrae straminae vix vel non striati superne subrubrescentes margine superne dense comatae. Paleae anguste lineares apice anguste acutae breviter fimbriatae non laceratae. Corollae flavae; corollae radii ca. 8-10, tubis ca. 1.5 mm longis indistinctis glabris, limbis ca. 7-9 mm longis anguste ellipticae; corollae disci ca. 25-30, ca. 5.5 mm longae, tubis distinctis ca. 2 mm longis dense hispidulis, limbus tubularibus glabris, lobis ca. 0.8 mm longis ca. duplo longioribus quam latioribus glabris; thecae antherarum ca. 1.5 mm longae, appendicibus ca. 0.5 mm longis angustis ovatis; achaenia ca. 3 mm longa glabra vix costata; carpodia valde asymmetrica; setae pappi ca. 15-20 perfacile deciduae ca. 3-4 mm longae. Grana pollinis ca. 25 μ diam.

Type: GUATEMALA: Sacatepéquez: Volcano Agua, alt. 10,000 ft. 4 Feb. 1908. W.A.Kellerman 7223 (Holotype US).

The species is known only from the type collection. The ray corollas of the species seem distinctive in the rather indistinct glabrous bases. The disk corollas also differ from those of related species by their glabrous lobes.

Literature Cited

Robinson, H. and R. D. Brettell 1973. Tribal revisions in the Asteraceae. IV. The relationships of Neurolaena, Schistocarpha and Alepidocline. Phytologia 25: 439-445.



Schistocarpha steyermarkiana H. Robinson, Holotype, United States National Herbarium. Photos by Victor E. Krantz, Staff Photographer, National Museum of Natural History.



Schistocarpa steyermarkiana H. Robinson, Holotype, enlargement of heads.